

Secure Telematics System Architecture

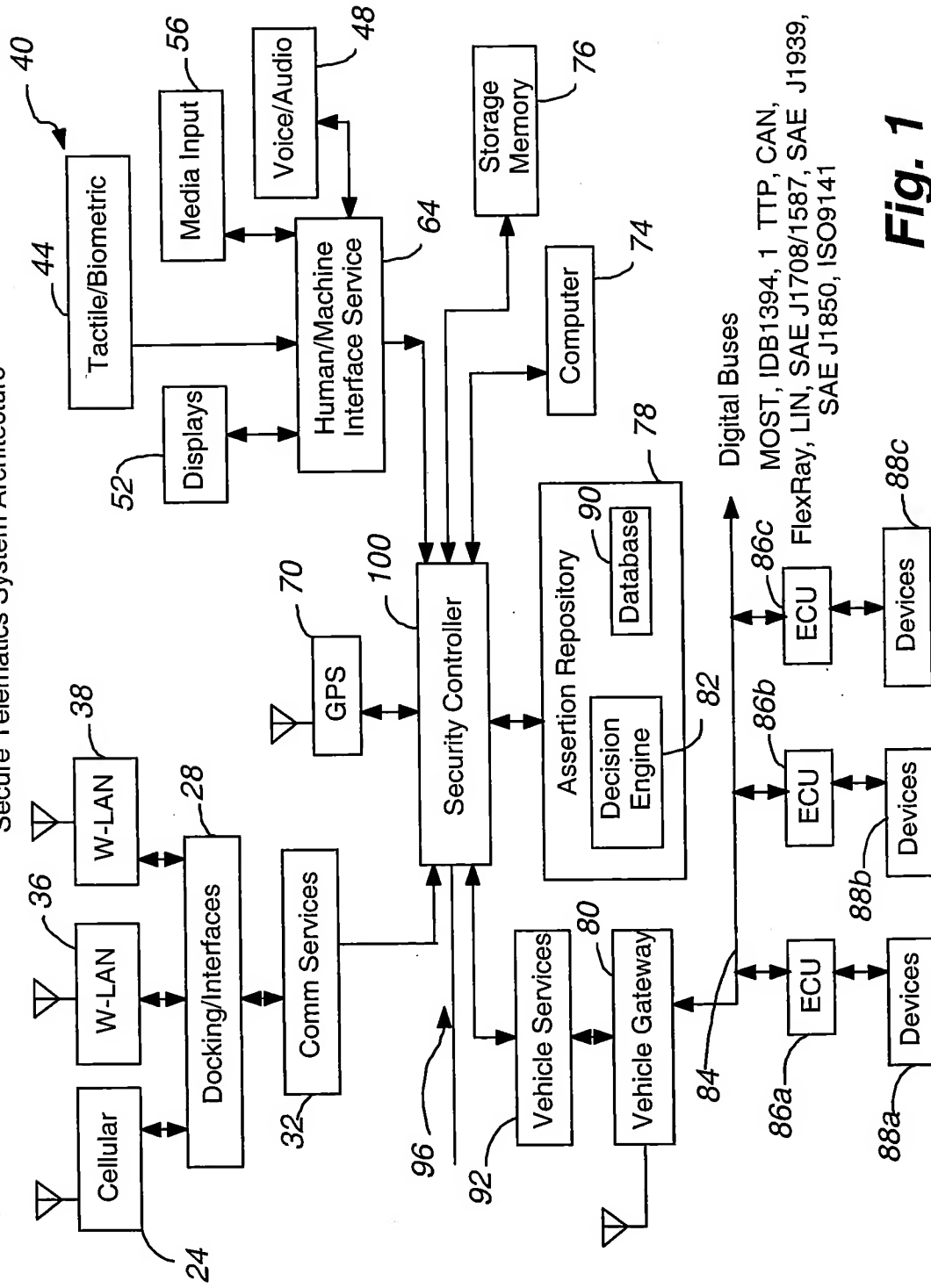
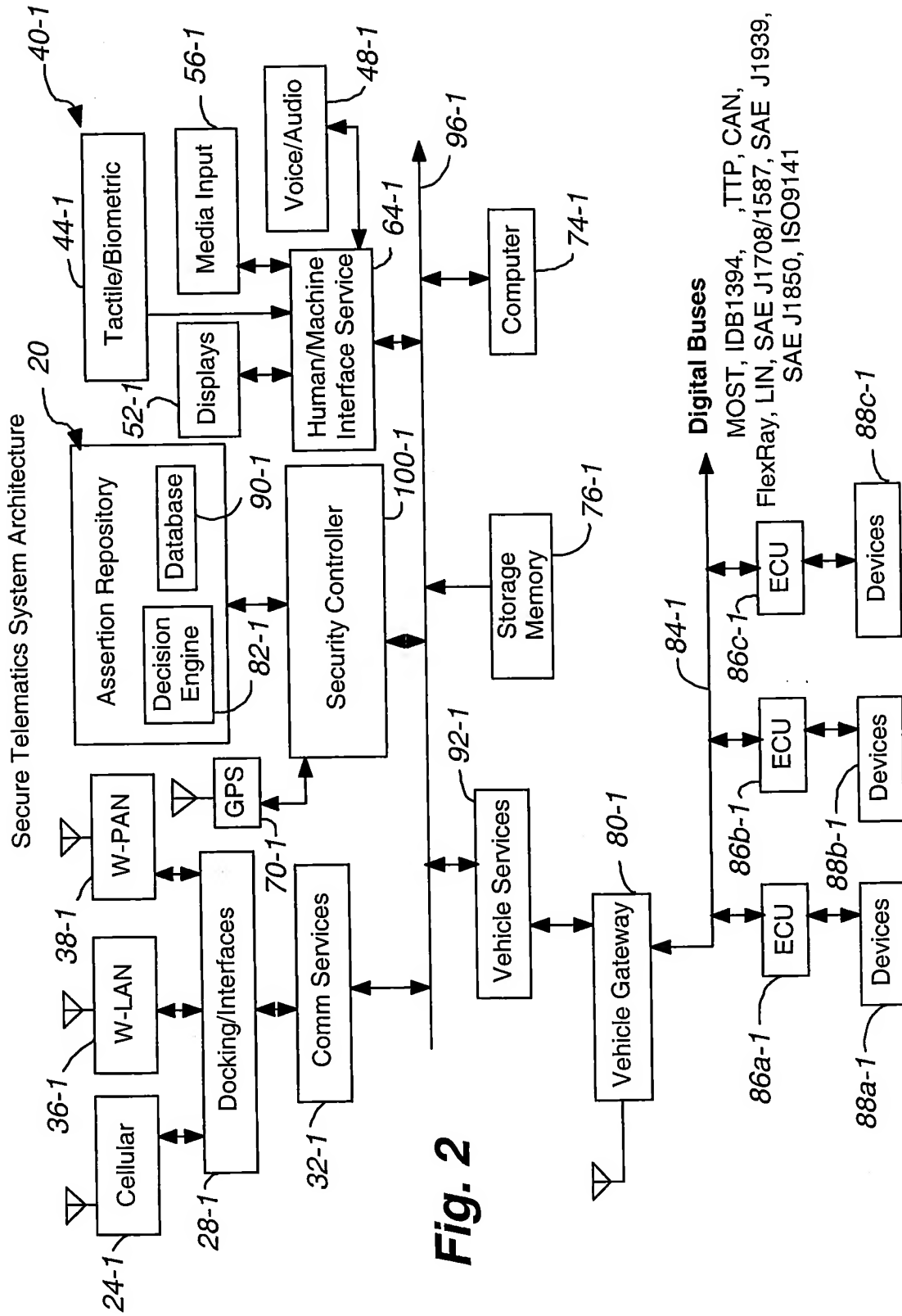


Fig. 1

MOST, IDB1394, 1 TTP, CAN,
FlexRay, LIN, SAE J1708/1587, SAE J1939,
SAE J1850, ISO9141



KDC-Modeled Security Controller

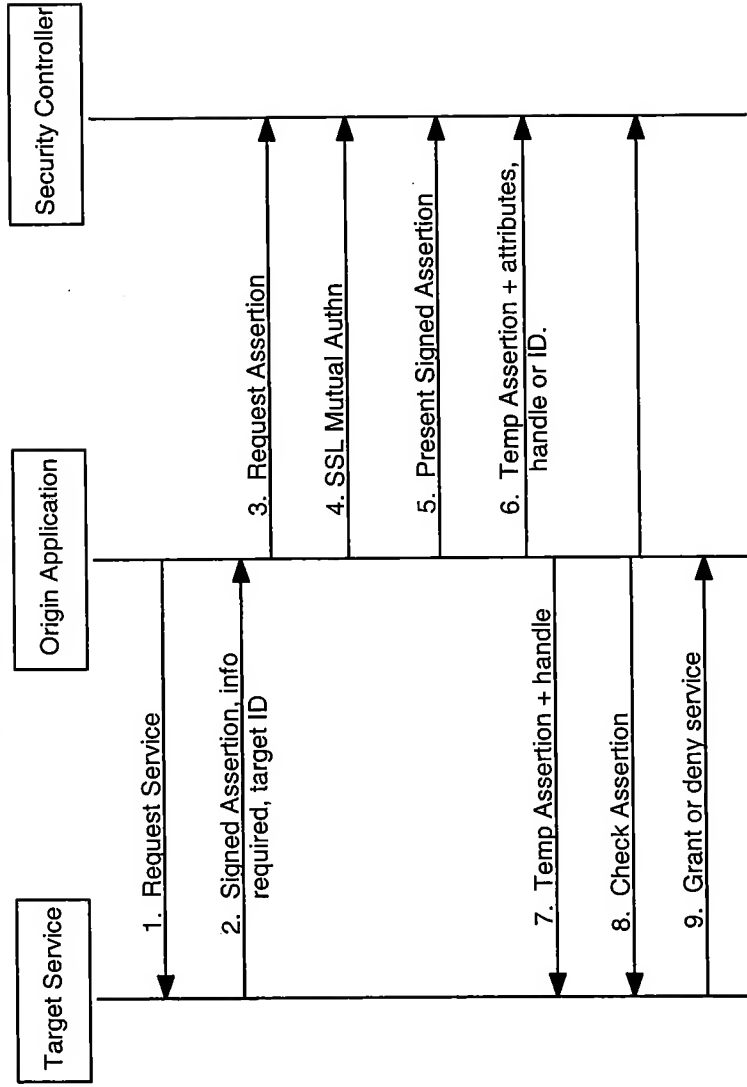


Fig. 3

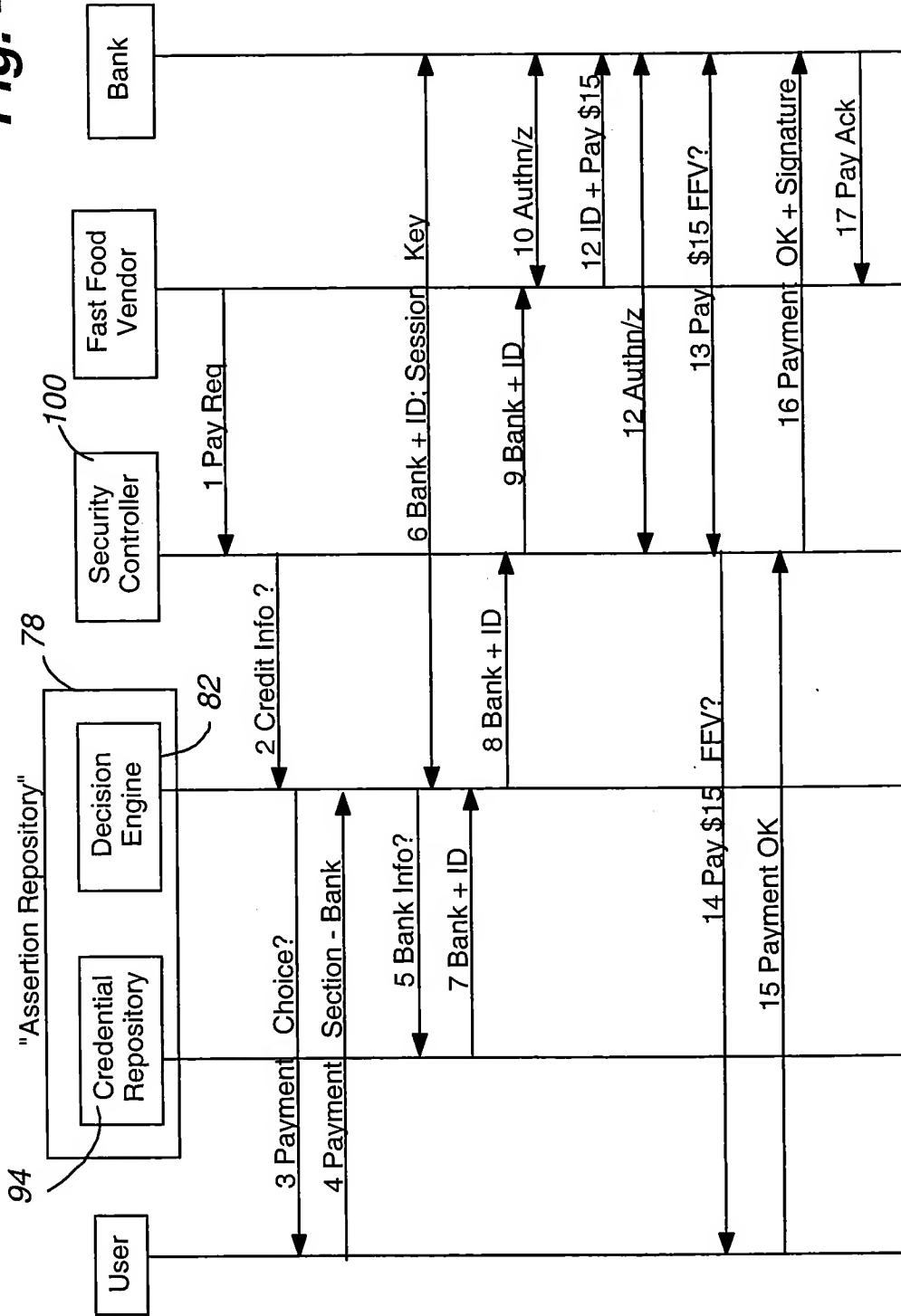
Flows between the Origin and Target may need to be encrypted to protect against "man-in-the middle" attacks.

The Origin Application may remain anonymous to the Target Services throughout the transaction.

The assertion check in step 8 could be done against the Security Controller's PKC, eliminating the need for Target Service to Security Controller communication.

Anonymous Drive-through Payment

Fig. 4



Anonymous Toll Payment - Airport Shuttle

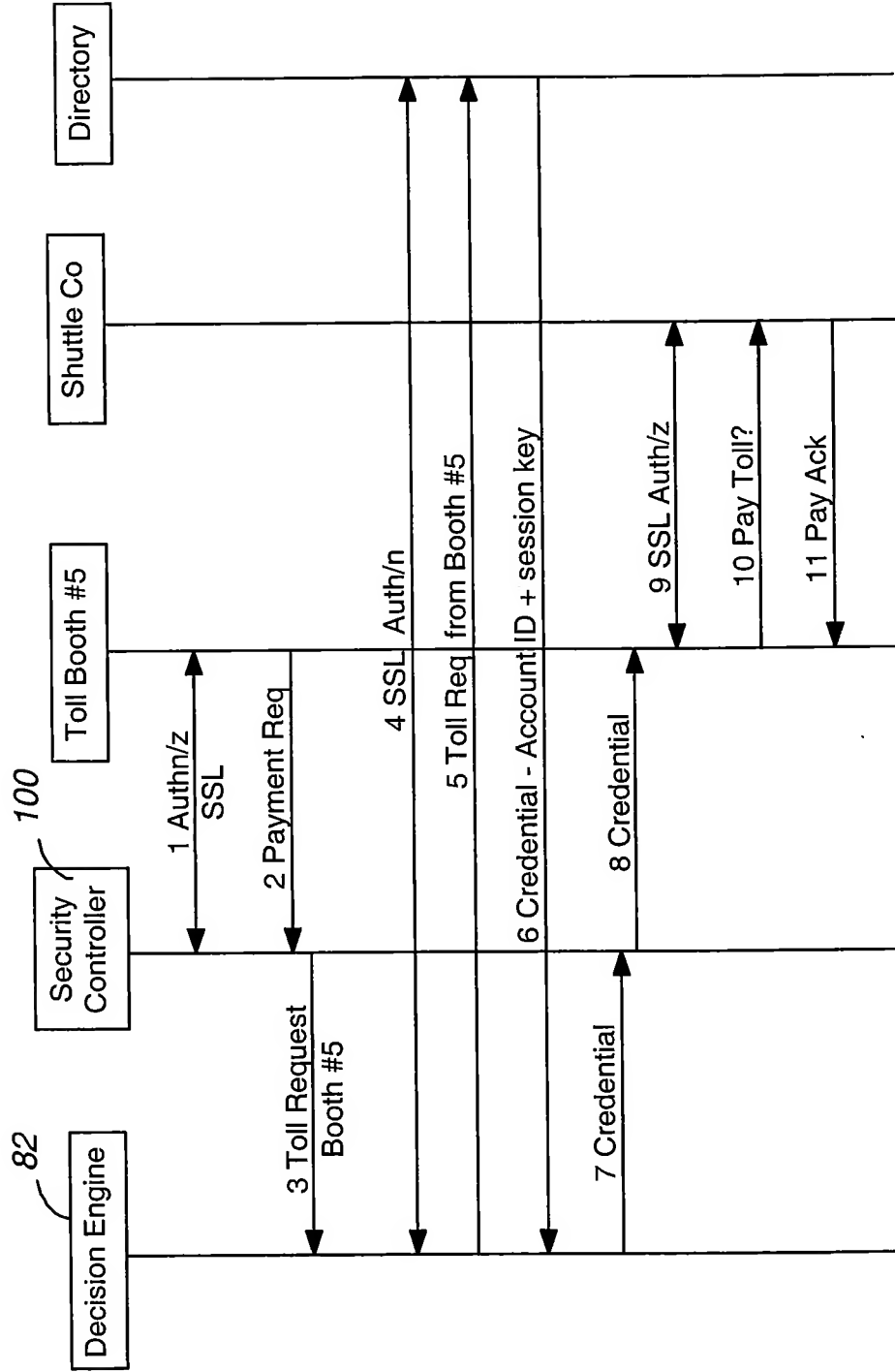


Fig. 5

Anonymous, Secure Cab Fare Payment

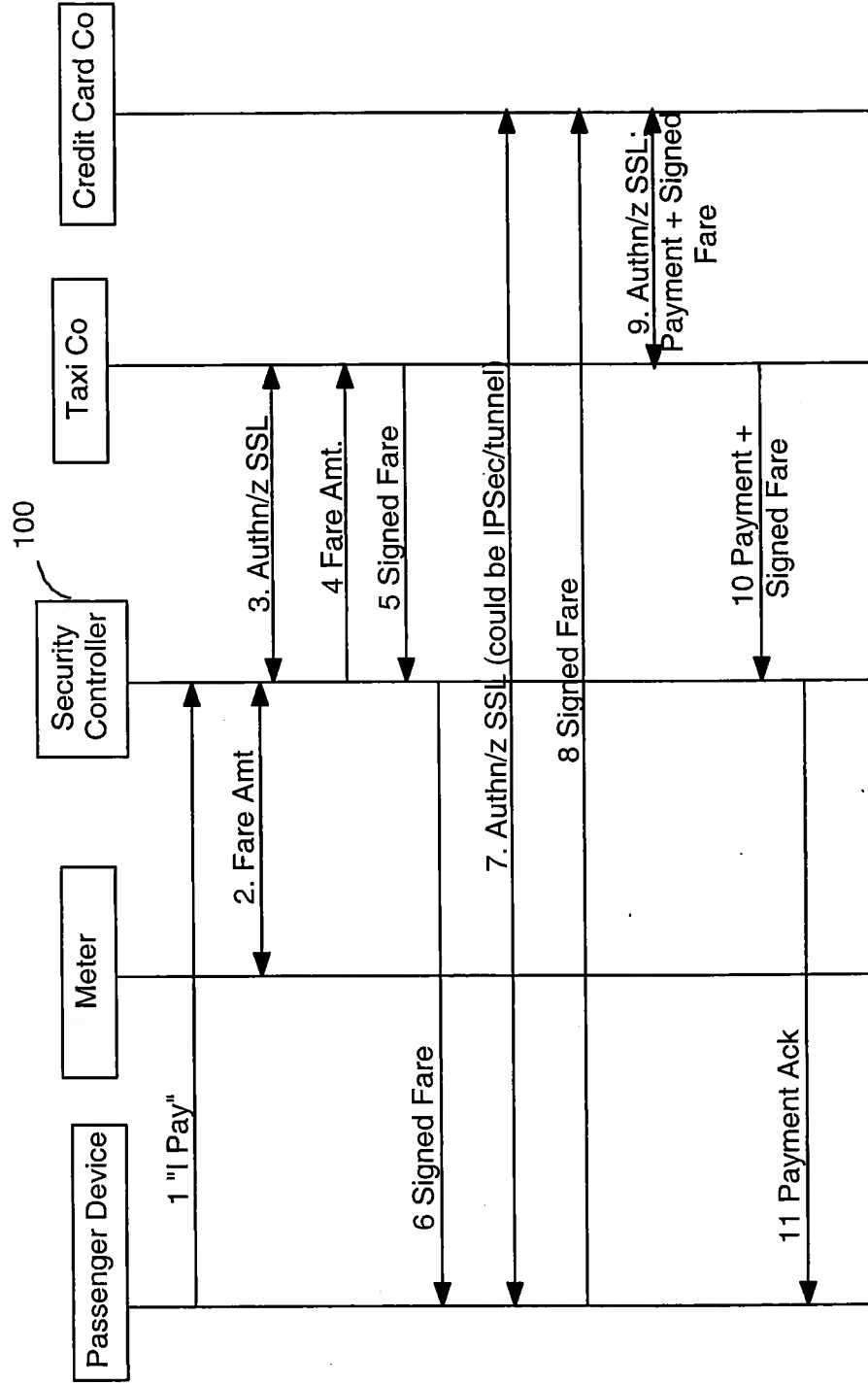


Fig. 6

Secure Vehicle Location Access

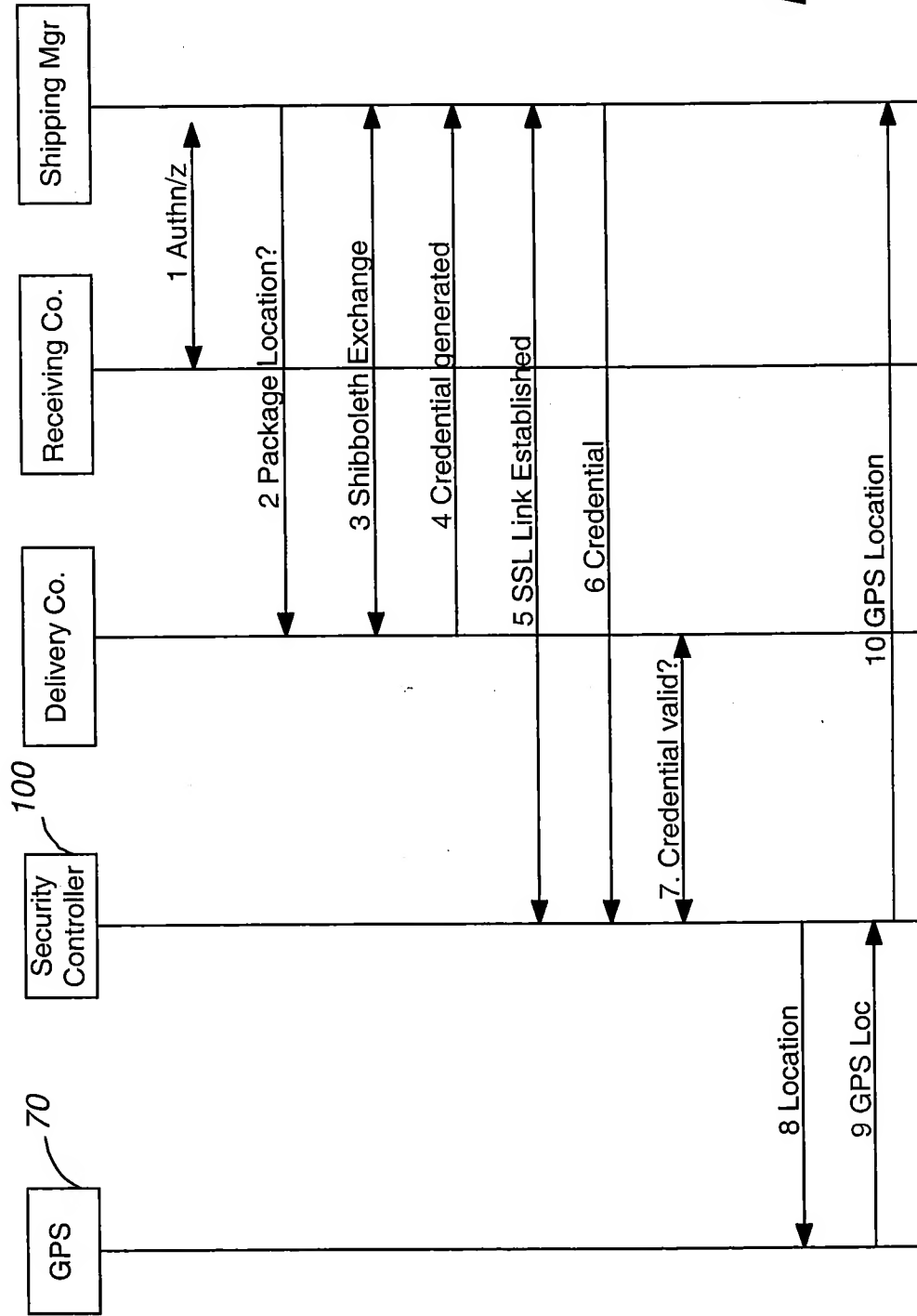


Fig. 7

Secure Access to Vehicle Bus by Consumer Device

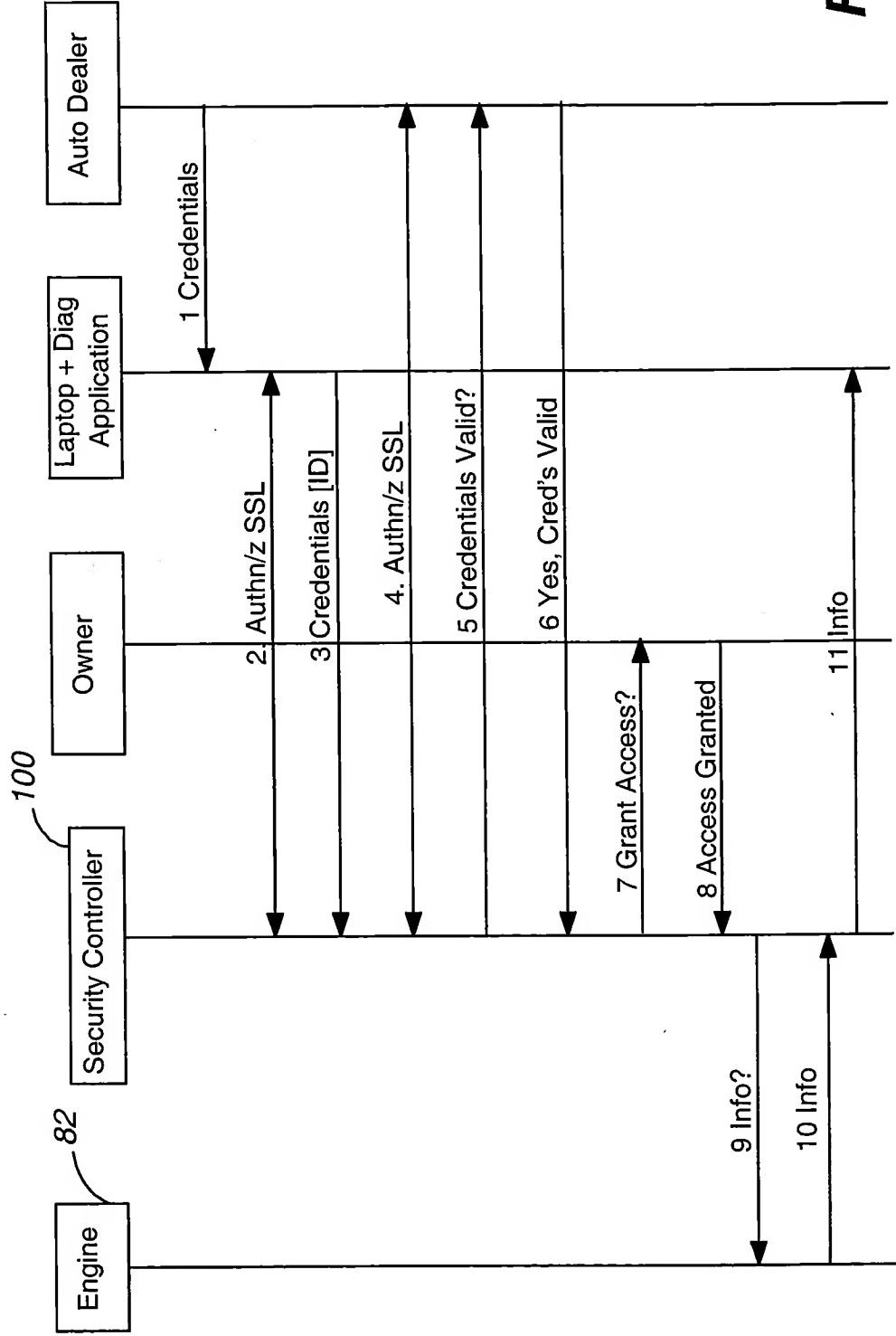


Fig. 8